Australian Bureau of Statistics

6361.0.55.002 - Employment Arrangements, Retirement and Superannuation, User Guide, Australia, April To July 2007

Summary

Main Features

08/12/2009 Note: CURF data item list updated to reflect the removal of the SEIFA variable IEOCDH from the expanded CURF.

NOTES

USING THIS PUBLICATION

Appropriate use and interpretation of the results of the Survey of Employment Arrangements, Retirement and Superannuation (SEARS) 2007 relies upon knowledge of what information was collected, how the information was collected and how the information was used to produce final estimates. This User Guide covers these topics in several chapters: Survey methodology; Data processing; Data quality; and Survey output and dissemination.

The final chapter presents technical information to assist you in using the expanded Confidentialised Unit Record File (CURF). In addition, the following are available on the ABS web site <www.abs.gov.au>:

- a comprehensive list of the data items available from the survey;
- the 2007 SEARS questionnaire;
- the 2007 SEARS prompt cards used to assist respondents; and
- the data items available on the expanded CURF.

Brian Pink

Australian Statistician

INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

Introduction

INTRODUCTION

OVERVIEW

This publication contains details about the 2007 Survey of Employment Arrangements, Retirement and Superannuation (SEARS 2007). It includes information about the survey objectives, the development process, content of the survey and the methods and procedures used in the collection and processing of data. It also includes information about the quality and interpretation of the survey results and about the products and services available.

SEARS 2007 was conducted by the Australian Bureau of Statistics (ABS) from 2 April to 7 July 2007. Information was collected from all persons aged 15 years and over resident in private dwellings throughout Australia. The survey collected detailed information about:

- the diversity of employment arrangements in Australia, including the types of employment people have, aspects of job stability and flexibility, and working patterns;
- the working arrangements that people use, or would like to use to balance their work and caring responsibilities;
- plans that people aged 45 years and over have for retirement, including transitions to retirement, expected sources of income at retirement and factors that might influence the decision to retire;
- characteristics of retirement including age at retirement, reasons for retiring and retirement income; and
- the superannuation coverage of individuals, including superannuation contributions and account balances.

Data can be cross-classified by a range of demographic and labour force characteristics such as age, sex, marital status, education, labour force status, and occupation and industry of multiple jobs.

Details of SEARS 2007 were tabled in Federal Parliament in accordance with section 6(3) of the **Australian Bureau of Statistics Act 1975** and the survey was conducted under the authority of the **Census and Statistics Act 1905**. The ABS sought the willing cooperation of people living in private dwellings. Under its legislation the ABS cannot release identifiable information about households, families or individuals. The confidentiality of all information provided by respondents is guaranteed.

OBJECTIVES OF SEARS 2007 SURVEY

The main objective of SEARS 2007 was to produce a comprehensive range of data to describe:

- The diversity of employment arrangements in the Australian workforce, with a focus on those characteristics considered important in identifying current and emerging working arrangements. These include:
    - employment type: (employees (excluding OMIEs) with and without paid leave entitlements, owner managers of incorporated enterprises (OMIEs), owner managers of unincorporated enterprises (OMUEs) and contributing family workers);
    - access to paid leave;
    - working patterns, including the number of hours worked, whether any hours

are worked on weekends or at night, shiftwork and overtime;

- job flexibility: whether has any say in start and finish times and whether able to work extra hours to take time off;
- job stability: whether usually works the same number of hours each week and whether guaranteed a minimum number of hours; job duration and expected future job duration;

- The way that people manage their caring responsibilities, with a focus on the working arrangements that people use to enable them to carry out their caring responsibilities, as well as the nature and extent of their caring responsibilities. This topic is new to SEARS 2007 and covers such areas as:
  - characteristics of care recipients (both children and adults) such as age, relationship to the carer, and for adults, the reason for providing care;
  - use of leave and type of leave used;
  - types of child care used (by families with children under 15 years of age; and
  - frequency and duration of care;

- Retirement and retirement intentions. The target population for this topic (approximately 7.6 million people) was all persons aged 45 years and over (excluding those in very remote areas or non-private dwellings). The retirement component is new to SEARS 2007, and covered topics such things as:
  - age at retirement from work;
  - occupation and industry of last full-time job;
  - time since retirement from the labour force;
  - expected time until retirement;
  - expected sources of income at retirement from full-time work;
  - transitions to retirement; and
  - intended age at retirement;

- Superannuation coverage of individuals and couples, including the amount people have contributed to superannuation and the amount they have accrued. The increase of the upper age limit for this cycle of the SEARS has enabled a more comprehensive picture of the superannuation circumstances of retired people than was possible with the 2000 SEAS cycle. Some data collection activity was reduced (e.g. only data from recent superannuation statements was collected in 2007). Otherwise, aside from some differences in collection periods for lump sums, the data items for the Superannuation topic are largely unchanged from SEAS 2000, and include:
  - the type of superannuation coverage that people have;
  - the type of accounts people have (accumulation, defined benefit, hybrid and self-managed accounts);
  - the type of superannuation contributions made to accounts (employer, salary sacrifice, personal and spouse contributions);
  - how much people were contributing to superannuation, and the amount of superannuation accrued;
  - reasons for not making personal contributions to superannuation; and
  - information on lump sums.

COMPARABILITY WITH SEAS 2000

While SEARS 2007 has a similar focus to SEAS 2000, and collected a similar range of data, changes in the survey scope and methodology, and in the collection and presentation of information in the seven years between the two surveys, mean that the estimates from the two surveys may not be strictly comparable. The major methodological change that occurred in SEARS 2007 was the introduction of computer assisted personal interview (CAPI), which replaced the pen and paper questionnaire format used for SEAS 2000. While not

quantifiable, this change was expected to result in improvements in data quality by minimising non-sampling error associated with complex sequencing in the survey questionnaire.

Another significant change impacting on the comparisons of the survey results was the change in age scope, from all persons aged 15 to 69 years used in SEAS 2000 to all persons aged 15 years and over for SEARS 2007.

Two new topics on how people balance their work and caring responsibilities and about the retirement and retirement intentions of people aged 45 years and over have also been included in SEARS 2007.

A number of changes were made to: questions collecting employment arrangements data items; the populations applicable to particular employment arrangements data items; and to the underlying concepts of some employment arrangements data items. These changes were necessary to reflect current priorities of users, and to align SEARS 2007 estimates with estimates from other ABS surveys collecting similar information. Details of the changes impacting on the employment arrangements estimates and on comparisons between SEAS 2000 and SEARS 2007 are discussed in Appendix 1 of **Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007** (cat. no. 6361.0).

Some of the superannuation data are comparable between 2000 and 2007. However, there were a number of changes to the superannuation data items that were introduced in SEARS 2007, including:

- separate identification of salary sacrificed contributions to superannuation;
- changes in output terminology: employer contributions (including salary sacrificed contributions) are now described as pre-tax contributions, and personal and spouse contributions are described as post-tax contributions;
- separate identification of self managed and small APRA funds;
- improved collection of statement reference periods to address a problem in SEAS 2000 that meant weekly contributions in that survey could only be published for people whose contributions had been made for two years or more;
- change in the reference period for collecting lump sum payments from superannuation. In SEAS 2000, only payments received in the last year were collected. This was expanded in SEARS 2007 to include payments received in the last 4 years; and
- collection of data on choice of superannuation fund.

Changes in the collection, and the quality, of superannuation data collected in SEARS 2007 are discussed in Appendix 2 of **Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007** (cat. no. 6361.0).

Some changes were also made to the income data items in SEARS 2007. These included the collection of superannuation salary sacrifice amounts in gross income (previously estimates included only some salary sacrificed amounts) and a change in output terminology from cash income to gross weekly income. In SEARS 2007 people who were living off savings, selling assets or living on partner/spouse income (for those aged 45 years and over), either as a supplement to their income or as their only source of finance, were separately identified. This change was introduced to complement similar information collected about expected sources of income for retirement and sources of income at retirement.

When undertaking comparisons with SEAS 2000 data, users should take care to compare

items by using the supporting information, user guide and attachments, and data item lists available for both SEAS 2000 and SEARS 2007, as well as Appendix 1 and Appendix 2 of **Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007** (<u>cat. no. 6361.0</u>). Particular attention should be paid to the definition of the data items, populations relating to the data items, and the reference periods that apply.

Survey methodology

SURVEY METHODOLOGY

SCOPE AND COVERAGE

The scope of SEARS 2007 includes persons aged 15 years and over who were usual residents of private dwellings throughout Australia, excluding the very remote areas, and covering about 97 per cent of the people living in Australia.

The survey collected information by personal interview from people who regarded the selected private dwellings as their main home. Visitors to selected dwellings were not selected to participate in the survey. Private dwellings are houses, flats, home units, caravans, garages, tents and other structures that are used as places of residence at the time of interview. Long-stay caravan parks are also included. These are distinct from non-private dwellings which include hotels, boarding schools, boarding houses and institutions. At 30 June 2007, there were 374,000 people aged 15 years and over living in non-private dwellings throughout Australia. The exclusion of these people (2% of the population) is unlikely to impact on the estimates included in this publication.

The exclusion of the 1% of the Australian population living in very remote areas will have little impact on national estimates, and will only have a minor impact on any aggregate estimates that are produced for individual States and Territories, except for the Northern Territory where the excluded population accounts for over 24% of persons.

The Australian population at 30 June 2007 (after the exclusion of people living in non-private dwellings and very remote areas of Australia) was 20,349,500, of which 16,401,600 were aged 15 years and over.

SAMPLE DESIGN AND SELECTION PROCEDURES

SEARS 2007 was designed to produce reliable estimates for the following:

- detailed person level information for Australia;
- detailed household level information for Australia;
- relatively detailed data for State or Territory; and
- relatively detailed data for capital city/balance of State.

The sample was therefore spread across the States and Territories in order to produces estimates that have a relative standard error (RSE) of no greater than 10% for characteristics that are relatively common in the national population, say that at least 10% of the population would possess.

Private dwellings included in the survey in each State and Territory were selected at random using a stratified, multi-stage cluster sample design. This sample included only private dwellings from the geographic areas covered by the survey. Each State and Territory of Australia was divided into geographic regions and then into smaller areas known as Collection Districts (CDs), the basic unit of enumeration in the Population Census. CDs were then divided into strata according to their geographic region (metropolitan and non-metropolitan), and the required number of CDs were randomly selected. All usual residents of the dwelling aged 15 years and over were asked to participate in the survey.

The initial sample for the survey consisted of 18,500 dwellings. To enable an acceptable level of data accuracy and reliability to be achieved after allowing for sample loss (through factors such as vacant dwellings inadvertently selected in the sample, non-contacts and persons out of scope and coverage), the sample size was designed to achieve an expected fully responding response rate of 13,379 households, or 83%, after sample loss.

SAMPLE ACHIEVED AND RESPONSE RATES

When enumeration commenced, some dwellings selected for inclusion in the sample were found to have no possibility of delivering a survey response. Collectively these are referred to as sample loss, and comprise the following groups:

- dwellings which are out of scope of the survey;
- dwellings which are under construction, demolished or converted to non-private dwellings or non dwellings;
- private dwellings which are vacant;
- private dwellings that contain out of scope residents (e.g. dwellings occupied by foreign diplomats and their dependants); or
- private dwellings that contain only visitors.

About 16,000 households remained in the survey after initial sample loss of approximately 2,300 households.

After the survey was enumerated, households were categorised as responding or non-responding. Responding households are either fully or partially responding, depending on whether all persons in the household participated in the survey. Non-responding households include households affected by death or illness of a household member and households in which all the person(s) in the household did not respond because they could not be contacted, had language problems or refused to participate.

The final number of fully responding households in SEARS 2007 was 13,736. Due to separate weighting being used for persons and households in SEARS 2007, data available from fully responding persons within a partially responding household were included in the published estimates for persons in SEARS 2007, covering 26,972 persons.

The final response rate after sample loss was 85%. The following table shows the number of fully responding households and persons achieved for each State and Territory, by capital city/balance of State:

SEARS final sample: number of households, 2007

CAPITAL CITY		BALANCE OF STATE		TOTAL	
Households	Persons(a)	Households	Persons(a)	Households	Persons(a)

	no.	no.	no.	no.	no.	no.
NSW	1 864	3 743	1 141	2 105	3 005	5 848
Vic.	1 936	3 810	835	1 524	2 771	5 334
Qld	1 040	2 049	1 298	2 499	2 338	4 548
SA	1 240	2 325	361	676	1 601	3 001
WA	1 315	2 535	430	812	1 745	3 347
Tas.	429	792	556	1 018	985	1 810
NT	491	932	189	368	680	1 300
ACT	934	1 784	-	-	934	1 784
Aust.	9 249	17 970	4 810	9 002	14 059	26 972

- nil or rounded to zero (including null cells)
(a) Number of persons aged 15 years and over

DATA COLLECTION

Survey development

Broad user consultation was undertaken during June and July 2005. A discussion paper was used as the key instrument in obtaining feedback and input from users for the development of the survey. Cognitive testing was carried out for questions designed for the new work and caring topic. Testing of the survey was also carried out to investigate respondent reaction and to ensure the effectiveness of interviewing procedures and instructions. Two trials were conducted:

- a pilot test in Sydney from 22 May to 1 June 2006; and
- a dress rehearsal in Adelaide and Tasmania from 23 October to 2 November 2006.

These tests were used to:

- develop improvements to interviewer field procedures used in SEARS;
- trial new questions that were added to the survey interview; and
- trial the use of the Computer Assisted Interview (CAI) being used for the first time for this survey.

Primary Approach Letter

Selected households were initially approached by mail via a Primary Approach Letter (PAL), informing residents of their selection for the survey and advising them that an interviewer would call to arrange a suitable time to conduct the survey interview. A brochure providing a guarantee of confidentiality and some background information on the survey and the interview process was included with the PAL.

Interviewers

Interviewers for the survey were recruited from a pool of ABS interviewers, with previous experience on ABS household surveys and ABS training. All phases of training emphasised that a sound understanding of the survey concepts, definitions and procedures was necessary to ensure a standard approach was employed by all interviewers involved in the survey. As well as two days training, each interviewer was provided with written instructions

detailing the procedures they were required to follow.

Computer Assisted Interview

The interview was designed to be administered using standard ABS procedures for conducting interviewer surveys with a responsible adult within the household to obtain valid and reliable results. The interview questionnaire concentrated on demographic and socio-economic information about each household person in on scope to identify population groups. To ensure consistency of approach, interviewers were instructed to ask the interview questions exactly as worded in the questionnaire. The interview included questions relating to ethnicity, education, labour force status, income, child care, age, superannuation, retirement and disability.

A Computer Assisted Interview was undertaken by all persons aged 15 and over within the household, after an adult resident provided information relating to the household, and the first parent within the first family provided information relating to child care arrangements.

Paper versions of the Computer Assisted Interview and prompt cards used in the survey are available in pdf format on the ABS website <www.abs.gov.au>.

Requesting data from a superannuation fund

During a face to face interview, respondents were asked to report the total number of accounts they had, and then the contribution and account balance information for up to their three main superannuation accounts, which accounted for 96.8% of the total number of accounts reported by respondents. For each of these three main accounts, respondents were asked the name of the fund (from which the fund type and benefit structure were derived), who (if anyone) currently contributed to that account, the amounts being contributed, and the amount of superannuation accrued (the superannuation account balance).

To ensure the quality of data collected, survey respondents were asked to refer to relevant superannuation statements to report contribution and balance amounts. Respondents who were unable to refer to a current superannuation statement were advised that they could, should they choose to, authorise their superannuation fund to provide the information directly to the ABS on behalf of their member.

Data processing

DATA PROCESSING

DATA CAPTURE

A combination of clerical and computer-based systems were used to process data obtained in the survey. Internal system edits were applied in the CAI questionnaire to ensure the completeness and consistency of the responses being provided. The interviewer could not proceed from one section of the interview to the next until responses had been appropriately completed.

A number of range and consistency edits were programmed into the CAI questionnaire. Edit messages automatically appeared on the screen if the information entered was either outside the previously determined range for a particular question, or contradicted information already recorded. These edit queries were resolved on the spot with respondents.

Data from the CAI questionnaire were electronically loaded to the processing database on receipt in the ABS office in each State or Territory. A record of superannuation authorisations was also electronically captured in the Regional Offices (ROs) via scanning the unique barcode.

Computer assisted coding was performed on responses to questions on languages, country of birth, occupation and industry of employment to ensure completeness. Data on relationships between household members were used to delineate families within the household, and to classify households by type. An outline of the computer assisted coding that was performed is provided below.

CODING

Language spoken and country of birth coding

The interview questionnaire listed the most frequently reported languages and countries. Interviewers were instructed to mark the appropriate box, or if the reported language or country was not among those listed, to record the name of the language or country for subsequent office coding. Languages were classified according to the **Australian Standard Classification of Languages (ASCL), 2005-06 (cat. no. 1267.0). Country of birth was classified according to the Standard Australian Classification of Countries (SACC), 1998 (cat. no. 1269.0).**

Occupation and industry coding

Occupation and industry codes relate to up to four jobs held by employed respondents at the time of interview. Occupation and industry codes have been dual classified to allow for comparisons to be made to other survey data that has been output using the previous classification. Please note however, the dual coded data is not available on the CURF, although it is available as a special data request. See the 'Special data services' section in Chapter 5: 'Survey output and dissemination' for more details.

Occupation was office coded based on a description of the kind of work performed, as reported by respondents and recorded by interviewers. Occupation was coded to the **Australian and New Zealand Standard Classification of Occupations (ANZSCO), 2006** (cat. no. 1220.0) as well as the **Australian Standard Classification of Occupation (ASCO) 1997** (cat. no. 1220.0). Industry of employment was coded to the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006** (cat. no. 1292.0) as well as the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 2003** (cat. no. 1292.0)**.**

Sector of employment coding

Sector coding (public sector, private sector or not determined) was conducted for the main and second job held by employed respondents at the time of interview. Sector coding was

applied within the CAI instrument for main job, and was office coded for second job.

Family relationship coding

Based on information recorded on the household form, all usual residents in each sampled dwelling were grouped into family units and classified according to their position within the family. This information was then transferred to each individual questionnaire.

Coding of educational qualifications

Level of highest educational qualification and field of study of that qualification were coded to the **Australian Standard Classification of Education (ASCED)** (cat. no. 1272.0)**. Coding was based on the level and field of study as reported by respondents and recorded by interviewers.**

Geography data

Geography data (Capital city, Balance of State/Territory; Remoteness areas) were classified according to the **Australian Standard Geographical Classification (ASGC)** (cat. no. 1216.0).

SURVEY PROCESSING

Information from the questionnaires was stored on a computer output file in the form of data items. In some cases, items were formed from answers to individual questions, and in other cases were derived from answers to several questions.

Data available from the survey are essentially 'as reported' by respondents. Imputation for missing values was not undertaken for any items within this survey. Where data was missing, not available or unknown, values have been coded as such and are available in the totals for each relevant item. In some cases it was possible to correct errors or inconsistencies in the data which were originally captured in the interview by referring to other data in the record; in other cases this was not possible and some errors and inconsistencies may remain on the data file.

A range of procedures and checks were followed in processing the survey to minimise errors occurring during processing. Checks were performed on records to ensure that specific values lay within valid ranges, and that relationships between items were within limits deemed acceptable for the purposes of this survey. These checks were also designed to detect errors which may have occurred during processing and to identify instances which, although not necessarily an error, were sufficiently unusual or close to agreed limits to warrant further examination.

Throughout processing, frequency counts and tables containing cross-classifications of selected data items were produced for checking purposes. The purpose of this analysis was to identify any problems in the input data which had not previously been identified, as well as errors in derivations or other inconsistencies between related items. In the final stages of processing, additional output editing and data confrontation was undertaken to ensure SEARS estimates conformed to known or expected patterns, and were broadly consistent with data from SEAS 2000 and other ABS and non-ABS data sources, allowing for methodological and other factors which might impact on comparability.

OUTPUT FILE

There were three files which fed into the combined dataset for SEARS: one that included information from the household, one that included data from the superannuation funds, and one that contained personal information. These files were merged into a combined dataset, which features the following six levels:

- the top level contains household information;
- the second level contains information on the family;
- the third level contains the majority of the information for each person aged 15 years and over;
- the fourth level contains a subset of person level data relating to the superannuation account/s held. Data on this level is only available through specialist consultancy services;
- the fifth level contains a subset of data relating to the job/s held; and
- the sixth level contains data relating to the care provided for children and/or adults. Data on this level is also only available through specialist consultancy services.

This dataset is a hierarchical file, which is an efficient means of storing and retrieving information that describes one to many, or many to many, relationships. For example, a person may have worked in two jobs, and have income information about one of these jobs but not the other. In this circumstance, different record levels are used to store the details related to these incidents. Some records at the lower levels may be null to maintain the hierarchy of the file.

Details of some of the items included for each level are:

- Household level:
  - characteristics relating to household such as State or Territory of usual residence, household income, number of persons in household and household composition;
- Family level:
  - characteristics relating to families such as child care arrangements, presence of a child with a disability in the family, number of persons in family, and family type;
- Person level:
  - employment arrangements - the number of jobs and hours respondents work, the types of jobs they have, the flexibility and stability of employment, working patterns and preferred working patterns;
  - retirement - whether and when respondents intend to retire, whether they plan to take up part time work as a transition to retirement or change their work in other ways, and how they intend to support themselves in retirement;
  - income - income received for the 2005-06 financial year which can include wages and salaries, income from businesses, rental properties, dividends, interest, pensions or allowances;
  - superannuation - what superannuation coverage respondents have and whether they are contributing to their superannuation, whether people are already receiving superannuation pensions or annuities, and whether lump sums have been received and how these were used; and
  - managing caring responsibilities - whether respondents care for children and/or adults and the working arrangements, if any, that they use, or would

like to use to help in balancing work and care responsibilities. The survey provides a broader insight into how caring responsibilities are managed within households;
  - Account level:
    - details for up to three accounts, such as type of fund, balance of account and who makes contributions to each account;
  - Job level:
    - details for up to four jobs. such as occupation and industry, hours worked, types of paid leave;
  - Care level:
    - detailed information about adult or child recipients of care, such as age, relationship to care provider and reason for care.

WEIGHTING, BENCHMARKING AND ESTIMATION

Weighting

Weighting is the process of adjusting results from a sample survey to infer results for the total population. To do this, a 'weight' is allocated to each sample unit. The weight is a value which indicates how many population units are represented by the sample unit. The first step in calculating weights for each unit is to assign an initial weight, which is the inverse of the probability of being selected in the survey. For example, if the probability of a household being selected in the survey was 1 in 600, then the household would have an initial weight of 600 (that is, it represents 600 households).

In SEARS 2007 there are two main types of 'sample units': persons and households. Weights were calculated separately for persons and households. Only complete households were given a household weight, but all fully responding persons, including those who belonged to an incomplete household, were given a person weight. For this reason, an estimate obtained using the person weights will not exactly match the same estimate obtained using household weights. For example, if the estimate of all persons is calculated using person weights, it will not match the same estimate calculated by multiplying the number of persons in each household by the household weights. The use of all fully responding persons with person level estimates allows a higher level of accuracy to be achieved for those estimates.

Benchmarking

The initial weights are then calibrated to align with independent estimates of the population of interest, referred to as benchmarks. Population benchmarks are projections of the Estimated Resident Population (ERP) data based on the 2001 Census of Population and Housing. Person level initial weights were calibrated to meet the benchmarks at designated state by area of usual residence by sex by age group classes. The household weights were calibrated to meet the household benchmarks at designated state by area of usual residence by household composition classes.

Weights calibrated against population benchmarks ensure that the survey estimates conform to the independently estimated distribution of the population, rather than to the distribution within the sample itself. Calibration to population benchmarks helps to compensate for over or under enumeration of particular categories of persons which may occur due to either the random nature of sampling or non-response. Benchmarking also ensures that survey estimates have consistency with other ABS surveys.

The 2007 SEARS was benchmarked to the estimated resident population (ERP) aged 15 years and over living in private dwellings in each State and Territory, excluding the ERP living in very remote areas of Australia at May 2007. Therefore, SEARS 2007 estimates do not (and are not intended to) match estimates for the total Australian resident population obtained from other sources (which include persons living in non-private dwellings, such as hotels and boarding houses, and persons living in very remote parts of Australia).

Benchmark variables used in the 2007 SEARS, with corresponding level of detail, were:

Person benchmarks

- State or Territory of usual residence - all States and Territories;
- Area of usual residence - capital city or balance of State;
- Age of person - grouped in the following way: 15-69, 20-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85+. Further collapsing was required for some States and Territories. For South Australia, balance of state, males were grouped to 20-29 and 80+, and females were grouped to 15-24, 30-39. For Western Australia, balance of state, males were grouped as 80+. For Tasmania, balance of state, males were grouped to 15-24. For the Northern Territory, capital city, males and females were grouped to 80+, and for Australian Capital Territory, capital city, females were grouped to 80+; and
- Sex of person - males and females.

Household benchmarks

- State or Territory of usual residence - all States and Territories;
- Area of usual residence - capital city or balance of State; and
- Household composition.

The benchmarks used in SEARS 2007 were the same as those used in SEAS 2000. The only change was to the age groupings used. In 2000 these age groups were 15-19, 20-24, 25-34, 35-44, 45-54 and 55-69. The expanded detail for age groups aims to improve estimates for older age groups.

Estimation

Each record in SEARS 2007 contains one weight - either a person weight or a household weight. The weights indicate how many population units, that is, persons or households, are represented by the sample unit. In addition, replicate weights have also been included, with 60 person replicate weights or 60 household replicate weights. The purpose of these replicate weights is to enable calculation of the relative standard error (RSE) for each estimate produced. Survey estimates of counts of persons are obtained by summing the weights of persons with the characteristic of interest. Estimates for means (such as mean age of persons) are obtained by summing the weights of persons in each category (e.g. individual ages), multiplying by the value for each category, aggregating the results across categories, then dividing by the sum of the weights for all persons. The same methods are applicable for estimates of households, families or jobs.

For more information on RSEs, please refer to Chapter 4: 'Data Quality'. For more information on use of weights, please refer to Chapter 6: 'Using the CURF data'. For a list of the weight variables on SEARS 2007 files (person weight, person replicate weights,

household weight, household replicate weights), please refer to the survey data item list on the ABS web site <www.abs.gov.au>.

Data quality

DATA QUALITY

DATA QUALITY

Although care has been taken to ensure that the results of this survey are as accurate as possible, there are certain factors which affect the reliability of the results to some extent, and for which no adequate adjustments can be made. These are known as sampling error and non-sampling error. These factors, which are discussed below, should be kept in mind when interpreting the results of the survey.

SAMPLING ERROR

Sampling error is the difference between the published estimates derived from a sample of persons and the value that would have been produced if all persons in scope of the survey had been enumerated. The estimates in this survey are obtained from the occupants of samples of dwellings. Therefore, the estimates are subject to sampling variability and may differ from the figures that would have been produced if information had been collected for all dwellings.

Measures of sampling error

One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied because only a sample of dwellings was included. There are about two chances in three that the sample estimate will differ by less than one SE from the figure that would have been obtained if all dwellings had been included, and about 19 chances in 20 that the difference will be less than two SEs.

Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate to which it relates. The RSE is a useful measure in that it provides an immediate indication of the percentage errors likely to have occurred due to sampling, and thus avoids the need to refer also to the size of the estimate.

$$RSE\% = (\frac{SE}{estimate}) \times 100$$

For estimates of population sizes, the size of the SE generally increases with the level of the estimate, so that the larger the estimate, the larger the SE. However, the larger the sampling estimate, the smaller the SE in percentage terms (RSE). Thus, larger sample estimates will be relatively more reliable than smaller estimates.

Only estimates with RSEs of 25% or less are considered reliable for most purposes. However, estimates with RSEs of 25% or more are included in all published 2007 SEARS output. Estimates with RSEs greater than 25% but less than or equal to 50% are annotated

by an asterisk to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs of greater than 50%, annotated by a double asterisk, are considered too unreliable for general use and should only be used to aggregate with other estimates to provide derived estimates with RSEs of 25% or less.

Relative standard errors for estimates from SEARS 2007 are published for the first time in 'direct' form. Previously a statistical model was produced that related the size of estimates to their corresponding RSEs, and this information was displayed via a standard error table. For SEARS 2007, RSEs for estimates were calculated for each separate estimate and published individually. The Jackknife method of variance estimation was used for this process, which involved the calculation of 60 'replicate' estimates based on 60 different subsamples of the original sample. The variability of estimates obtained from these subsamples was used to estimate the sample variability surrounding the main estimate. Unlike the previous method, direct calculation of RSEs can result in larger estimates having larger RSEs than smaller ones, since these larger estimates may have more inherent variability.

Standard errors of proportions and percentages

Proportions and percentages, which are formed from the ratio of two estimates, are also subject to sampling errors. The size of the error depends on the accuracy of both the estimates. For proportions where the denominator is an estimate of the number of households in a grouping, and the numerator is the number of households in a sub-group of the denominator group, the formula for the RSE is given by:

$$RSE\% \left(\frac{x}{y} \right) = \sqrt{[RSE\%(x)]^2 - [RSE\%(y)]^2}$$

This formula is only valid when x is a sub-group of y .

The SE of an estimated percentage or rate, computed by using sample data for both numerator and denominator, depends on the size of both numerator and denominator. However, the formula above shows that the RSE of the estimated percentage or rate will generally be lower than the RSE of the estimate of the numerator.

Standard errors of differences

The difference between two survey estimates (of numbers or percentages) is itself an estimate and is therefore subject to sampling variability. The SE of the difference between two survey estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) can be calculated using the formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

While this formula will only be exact for differences between separate and uncorrelated (unrelated) characteristics or sub-populations, it is expected to provide a good approximation for all of the differences likely to be of interest in this survey.

Testing for statistically significant differences

Statistical significance testing can be undertaken to determine whether it is likely that there is a difference between two estimates from different samples. The standard error for the

difference between two estimates can be calculated using the formula in the paragraph above. The standard error is used to calculate the following test statistic:

$$\frac{|x-y|}{SE(x-y)}$$

If the value of the test statistic is greater than 1.96, then we may say that we are 95% certain that there is a statistically significant difference between the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a real difference between the populations.

NON-SAMPLING ERROR

Lack of precision due to sampling variability should not be confused with inaccuracies that may occur for other reasons, such as errors in response and recording. Inaccuracies of this type are referred to as non-sampling error. This type of error is not specific to sample surveys and can occur in a census enumeration. The major sources are:

- errors related to scope and coverage;
- response errors such as incorrect interpretations or wording of questions;
- interviewer bias;
- non-response bias; and
- processing errors.

These sources of error are discussed in turn below.

Errors related to scope and coverage

Some dwellings may have been inadvertently included or excluded because, for example, the distinctions between whether they were private or non-private dwellings may have been unclear. All efforts were made to overcome such situations by constant updating of lists both before and during the survey. Furthermore, some persons may have been inadvertently included or excluded because of difficulties in applying the scope rules concerning the identification of usual residents, and the treatment of some overseas visitors.

Response errors

Response errors may have arisen from three main sources:

- deficiencies in questionnaire design and methodology;
- deficiencies in interviewing technique; and
- inaccurate reporting by respondents.

Errors may be caused by ambiguous or misleading questions, inadequate or inconsistent definitions of terminology used, poor questionnaire design (e.g. causing some questions to be missed), or poor or inaccurate responses from superannuation funds requested to supply data. Thorough testing occurred before the questionnaire format was finalised to minimise problems in questionnaire content, design and layout.

Response errors may also have occurred due to the lengthy nature of the survey, resulting in interviewer and/or respondent fatigue (i.e. loss of concentration). While efforts were made

to minimise errors arising from deliberate misreporting or non-reporting by respondents (including emphasising the importance of the data and checking consistency within the survey instrument), some instances will have inevitably occurred.

Recall error may also have led to response error. Information recorded in this survey is essentially 'as reported' by respondents, and hence may differ from information available from other sources or collected using different methodologies. Responses may be affected by imperfect recall or individual interpretation of survey questions. Reference periods used in relation to each topic were selected to suit the nature of the information being sought; in particular to strike the right balance between minimising recall errors and ensuring the period was meaningful, representative (from both respondent and data use perspectives) and able to yield sufficient observations in the survey to support reliable estimates. It is possible that the reference periods did not suit every person for every topic, and that difficulty with recall may have led to inaccurate reporting in some instances.

Lack of uniformity in interviewing also results in non-sampling error. Thorough training programs, a standard Interviewer's Manual, the use of experienced interviewers and checking of interviewers' work were methods employed to achieve and maintain uniform interviewing practices and a high level of accuracy in recording answers on the survey questionnaire. A respondent's perception of the personal characteristics of the interviewer can be a source of error. The age, sex, appearance or manner of the interviewer may influence the answers obtained. In addition to the response errors described above, inaccurate reporting may occur if respondents provide deliberately incorrect responses.

Non-response bias

One of the main sources of non-sampling error is non-response, that is, when persons resident in households selected in the survey cannot be contacted, or, if contacted, are unable or unwilling to participate. Non-response can affect the reliability of results and can introduce bias. The magnitude of any bias depends upon the level of non-response and the extent of the difference between the characteristics of those people who responded to the survey and those who did not.

As it would not have been possible to quantify accurately the nature and extent of the differences between respondents and non-respondents in the survey, every effort was made to reduce the level of non-response.

For further information about the effect of non-response bias on SEARS 2007 superannuation data, see the entry for Superannuation under the 'Data quality' section in this chapter.

Processing errors

Processing errors may occur at any stage between initial collection of the data and final compilation of statistics. There are four stages where error may occur:

- coding, where errors may have occurred during the coding of various items by office processors;
- data transfer, where errors may have occurred during the transfer of data from the questionnaires to the data file;
- editing, where computer editing programs may have failed to detect errors which reasonably could have been corrected; and
- manipulation of data, where inappropriate edit checks, inaccurate weights in the

estimation procedure and incorrect derivation of new items from raw survey data can also introduce errors into the results.

To minimise the likelihood of errors occurring, a number of quality assurance processes were employed throughout all stages of survey development and processing.

Seasonal effects

The estimates from the 2007 SEARS are based on information collected from April to July 2007, and due to seasonal effects they may not be fully representative of other time periods in the year. For example, SEARS 2007 asked standard ABS questions on labour force status to determine whether a person was employed. Employment is subject to seasonal variation throughout the year. Therefore, SEARS 2007 results for employment could have differed if the survey had been conducted over the whole year or in a different part of the year.

For further information about seasonal effects on superannuation data, see Appendix 2 in **Employment Arrangements, Retirement and Superannuation, 2007** (cat. no. 6361.0).

LIMITATIONS ON DATA ITEMS

Social marital status

The distinction between visitors and usual residents is used to ensure that partnerships are identified only between persons usually resident in the same household. Due to the scope exclusions identified in Chapter 2: 'Survey Methodology', the standard variable used in SEARS 2007, 'Social marital status', identifies the living arrangements of couples in the Australian population only. A 'social marriage' is deemed to exist when a registered marriage, de facto marriage or couple relationship (either opposite-sex or same-sex) is reported in response to a question about relationships within the household, and when the two individuals concerned are usually resident in the same household. This may result in inconsistencies when social marital status is used in combination with some items output in SEARS 2007. For example, a person may report they intend to live off their spouse's income at retirement but may have a social marital status of 'Not married'. This is considered valid as the respondent may be in a registered marriage but the spouse may usually reside elsewhere.

Socio-Economic Indexes for Areas (SEIFA)

There are five Socio-Economic Indexes for Areas (SEIFAs) compiled by the ABS following each population census. Each of the indexes summarise different aspects of the socio-economic status of the people living in those areas. The index refers to the population of the area (the Census Collector's District) in which a person lives, not to the socio-economic situation of the particular individual. The index used in this publication was compiled following the 2001 Census. For further information about the SEIFAs see Information Paper: **Census of Population and Housing - Socio-Economic Indexes for Areas, Australia** (cat. no. 2039.0).

Reference periods

Different reference periods were used for collecting various components of SEARS 2007 data to correspond with information that would be readily available to respondents of the survey. As in the Labour Force Survey, labour force status is determined on the basis of activity in the reference week, that is, the week prior to the interview. Details of employment arrangements were generally collected on a 'usual working arrangements' basis. This differs from SEAS 2000 which only collected details of working arrangements based on work undertaken in the last 4 weeks.

Income data were collected using the last financial year as the reference period for business and property income, and the last pay period for wages and salaries and other sources of private income. Reported income amounts were recalculated to a weekly amount.

The preferred reference period for collection of superannuation data was the 2005-2006 financial year. However, where information was not available for this period, information was accepted for other periods, providing they commenced no earlier than 1 July 2004. In a small number of cases, information up to August 2007 was also used. Superannuation contribution amounts were converted to a weekly contribution amount.

The different reference periods for different topics in the survey can lead to apparent inconsistencies in the estimates. For example, a person may be currently working for an employer but also report some business income that relates to an unincorporated business that they were operating in the previous financial year. Similarly a person may be unemployed but report employer contributions to superannuation that were made in the 2005-2006 financial year when they were employed. The data as reported are assumed to be correct.

Jobs data

SEARS 2007 collected detailed information for a person's main job and second job (where applicable). A reduced set of information was also collected for a person's third and fourth job. While much of the jobs data is collected in relation to individual jobs, information about working patterns and preferred working patterns are based on the overall commitment to work, that is, for all jobs in which a person works, rather than each job singly. For example, respondents were asked about leave entitlements, in relation to each specific job, but were asked whether they usually do any work between 7pm and 7am, or on weekends in relation to all jobs. For the majority of the population who have only one job there is little if any difference in this approach, however, it does provide a more comprehensive picture of the total current employment commitments of multiple jobholders.

Care

SEARS 2007 collected information about the caring responsibilities that people have as an indication of their burden of care and the working arrangements they use, or would like to use, to help them manage these caring responsibilities. Questions relating to care of own children were asked of the first person in the family only, while everyone in the household was asked about any other caring responsibilities they had, either within or outside the household. While some information was collected on the characteristics of persons receiving the care, the focus of SEARS 2007 was on the care providers. More detailed information about the use and demand for childcare is available from **Child Care Australia, June 2005** (cat. no. 4402.0) and information about disabled or aged persons and their carers is available from **Disability, Ageing and Carers, Australia, 2003** (cat. no. 4430.0).

Inadequate information was collected for a small proportion of households (<1%) in relation

to the children that lived in the household, which affected questions about caring arrangements and working arrangements used to care. Persons from these households are shown in a 'not determined' category for applicable data items.

Retirement

SEARS 2007 collected information about the plans that people aged 45 years and over have for retirement, including transitions to retirement, expected sources of income at retirement, reasons for retiring and retirement income. Inadequate information was collected to determine the retirement status (whether retired or not retired from the labour force) of a small number of people aged 45 years and over. Inadequate information was also collected regarding the retirement plans of a small number of people currently working part-time, and a number of people who did not know whether they were going to work part-time as a transition to retirement, but did intend to retire. These people are shown in a 'not determined' category for applicable data items.

Income

SEARS 2007 uses both gross personal income and equivalised gross household income. People's economic well-being is largely determined by their command over economic resources, and the amount of income to which they have access is an important component of these resources. While income is usually received by individuals, it is normally shared between family members. Even when there is no transfer of income between members of a household, they are still likely to benefit from the economies of scale that arise from the sharing of dwellings. Household income therefore provides an indication of people's economic well-being. However, larger households need greater income to achieve the same standard of living as smaller households, so to make meaningful comparisons, household income is adjusted or equivalised to take account of differing household size and composition.

Equivalised gross household income data are presented in this publication in quintiles. The quintiles are groupings that result from ranking all persons in the population in ascending order according to their equivalised gross household income, then dividing the population into five equal groups, each comprising 20% of the estimated population. The population used for this purpose includes all people living in private dwellings, including those under the age of 15 years. As the scope of this publication is restricted to only those persons aged 15 years and over, the distribution of this smaller population across the quintiles is not necessarily the same as it is for persons of all ages, i.e. the percentage of persons aged 15 years and over in each of these quintiles may be larger or smaller than 20%.

Superannuation

In SEARS 2007 a greater coverage of weekly contribution values was achieved by converting more of the reported contributions to a weekly equivalent. Total reported contribution amounts were converted to a weekly rate by dividing the total contribution amount by the contribution period in weeks. The contribution period was determined based on the length of time a respondent had been contributing to an account, and the period covered by their superannuation statement. If a respondent had been contributing to their superannuation account for less than 12 months, the statement length was the contribution period. If the statement was for a full year, the reported contributions were divided by 52.145 to obtain a weekly contribution rate. If the statement covered a monthly period, then the reported contributions were divided by the number of months multiplied by 4.345 to obtain

the weekly contribution rate. Otherwise, statement periods were converted into weekly amounts by subtracting the start date of the statement from the end date to get the number of days, then converting the number of days into weeks by dividing by 7 and using the integer.

Respondents were asked to report the contribution period for contributions estimated without reference to a statement. If contribution periods were not reported, amounts were averaged over an assumed twelve months period. One-off payments were also averaged over twelve months.

Some respondents reported details that yielded either very high or very low weekly rates of contribution. A number of factors may cause high contribution rates, such as very large irregular or one-off contributions being made to the superannuation account, or a roll-over amount from a previous fund being reported as a contribution. Fund member responses to changes in the superannuation legislation may also have impacted on the size and volume of contributions made during the SEARS 2007 reference period (see Superannuation legislation in Appendix 2 of **Employment Arrangements, Retirement and Superannuation, 2007** (cat. no. 6361.0)). Small irregular or one-off payments can also result in very low weekly contribution amounts.

Missing values for superannuation data and their effects on published medians and means

When a contribution or account balance was not able to be determined for a respondent, the value of that contribution or balance was recorded as missing. In estimation classes with significant percentages of missing values, the risk of biased estimates is increased. This is particularly true when the characteristics of the respondents with missing values and those with known values are significantly different. For example, analysis shows that there is a risk of underestimation in the median and mean values of superannuation savings in the 15-24 year old age group. This implies that the uncertainty in superannuation estimates for this age group may be greater than is indicated by the published RSEs. The following table summarises the overall 'missingness' in each of the superannuation variables.

Analysis of respondents with missing values

	Missing values %	Missing values for 15-24 year olds %
Accumulation accounts	11.7	17.8
Withdrawal/resignation benefit of defined benefit accounts	5.0	3.7
Withdrawal/resignation benefit of hybrid accounts	9.1	14.0
Total superannuation balance	11.6	17.4

More information about the collection and quality of superannuation data in this survey is included in Appendix 2 of **Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007** (cat. no. 6361.0).

Survey output and dissemination

SURVEY OUTPUT AND DISSEMINATION

DATA AVAILABILITY

A range of data products are available from SEARS 2007 in both published form and on request. Products available on the ABS website <www.abs.gov.au> are indicated accordingly.

Publications

The publication, **Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007** (cat. no. 6361.0), presents summary results from the survey. The tables in the publication are predominantly national level data tables, but some tables show State and Territory results. There are 2 superannuation time series tables. The publication was released in November 2008 and is available free of charge on the ABS web site <www.abs.gov.au>. An electronic version of the tables in spreadsheet format, will also be available on the ABS web site <www.abs.gov.au> in November. The spreadsheets present the estimates and related RSEs for each publication table.

State/Territory tabulations

Versions of the tables from the summary publication compiled separately for each State and Territory will be available on the ABS web site <www.abs.gov.au> in November 2008. These tables will be customised depending on the size of the sampling error. They will be released in spreadsheet format as **Employment Arrangements, Retirement and Superannuation; State Tables (cat. no. 6361.0.55.003).**

Microdata

For users who wish to undertake more detailed analysis of the survey data, microdata from the 2007 SEARS will be released in the form of an expanded confidentialised unit record file (CURF): **Microdata: Employment Arrangements, Retirement and Superannuation, Expanded CURF, Australia, April to July 2007** (cat. no. 6361.0.55.001). The expanded CURF will contain detailed survey information and will only be available via the Remote Access Data Laboratory (RADL), which is a secure internet-based data query service. Information on using the expanded CURF is included in Chapter 6: Using the CURF data.

Clients interested in finding out more about the CURFs should contact the Microdata Access Strategies section by emailing <microdata.access@abs.gov.au> or by phoning (02) 6252 7714. A full range of up-to-date information about the availability of and access to ABS CURFs is also available via the ABS web site <https://www.abs.gov.au> (see Services, Confidentialised Unit Record Files (CURFs)).

Special data services

The published data are only a small portion of the data collected in the survey. The ABS offers specialised consultancy services to assist clients with more complex statistical information needs. Clients may wish to have unit record data analysed according to their own needs, or require tables incorporating data items and populations tailored to their

requirements.

Tables and other analytic outputs can be made available electronically or in printed form. However, as the level of detail or disaggregation increases with detailed requests, the number of contributors to data cells decreases. This may result in some requested information not being able to be released due to confidentiality or sampling variability constraints. All specialist consultancy services attract a service charge, and clients will be provided with a quote before information is supplied. For further information, contact ABS information consultants on 1300 135 070.

RELATED PUBLICATIONS

Current publications and other products released by the ABS are freely available on the ABS web site <www.abs.gov.au>. Some ABS publications which may be of interest are:

- **Employment Arrangements and Superannuation, Australia, June 2000** (cat. no. 6361.0)
- **Superannuation Coverage and Financial Characteristics, Australia, June 2000** (cat. no. 6360.0)
- **Australian Labour Market Statistics, July 2008 (cat. no. 6105.0)**
- **Census of Population and Housing: Selected Social and Housing Characteristics, Australia, 2001 (cat. no. 2015.0)**
- **Disability, Ageing and Carers, Australia: Summary of Findings, 2003** (cat. no. 4430.0)
- **Household Expenditure Survey, Australia: Summary of Results, 2003-04** (cat. no. 6530.0)
- **Household Income and Income Distribution, Australia, 2003-04 (cat. no. 6523.0)**
- **Labour Force, Australia, August 2008 (cat. no. 6202.0)**
- **Labour Mobility, Australia, February 2006 (cat. no. 6209.0)**
- **Voluntary Work, Australia, 2006 (cat. no. 4441.0)**
- **Labour force status and other Characteristics of Families, Australia, June 2008** (cat. no. 6224.0)
- **Retirement and Retirement Intentions, Australia, July 2006 June 2007** (cat. no. 6238.0)
- **Employee Earnings, Benefits and Trade Union Membership, Australia, August 2007 (cat. no. 6310.0)**
- **Barriers and Incentives to Labour Force Participation (cat. no. 6239.0)**
- **Working Time Arrangements, Australia, November 2006 (cat. no. 6342.0)**
- **Forms of Employment, Australia, November 2007 (cat. no. 6359.0)**

Using the CURF data

USING THE CURF DATA

USING THE CURF DATA

Microdata from SEARS 2007 is available in the form of an expanded CURF available only via the remote access data laboratory (RADL). The RADL is an on-line database query

system under which microdata are held on a server at the ABS, to which users can submit programs to interrogate and analyse data, and access the results. Further information about the RADL facility and obtaining access to the CURF are available on the ABS website <www.abs.gov.au> (see Services We Provide/CURF Microdata/Accessing CURF Microdata).

This chapter provides details on how to use the microdata, content of the files and conditions of microdata release.

About the microdata

SEARS 2007 microdata are released under the provisions of the **Census and Statistics Act 1905**. This Act allows for the release of data in the form of unit records where the information is not likely to enable the identification of a particular person or organisation. Accordingly, there are no names or addresses of survey respondents on the CURF, and other steps have been taken to protect the confidentiality of respondents. These include removing some items from the CURF, reducing the level of detail shown for some items, and changing characteristics for some records. To further assist in the confidentiality of unit record data, all dollar values have been perturbed. That is, each value has been adjusted up or down by a small, random amount. Also, for each of these items, each value above or below a certain cut-off limit has been set to the mean of all the values above or below the cut-off limit.

As a consequence of the steps taken to ensure confidentiality, data on the CURF will not match published data exactly.

Steps to confidentialise the data on the CURF are taken in such a way to ensure the integrity of the data and optimise its content, while maintaining the confidentiality of respondents. Intending purchasers should ensure that the data they require, at the level of detail they require, are available on the CURF. Data collected in the survey but not contained on the CURF may be available as statistics in tabulated form on request. A list of the data items on the expanded CURF is available on the ABS website <www.abs.gov.au> (see 6361.0.55.002 SEARS 2007 CURF Data Items).

FILE STRUCTURE AND USE

The SEARS 2007 expanded CURF contains a set of four files with confidentialised records. These files are in a hierarchical relationship and provide records at the following levels:

- Household level: contains information about State or Territory, area of usual residence (capital city/balance of State), tenure type by landlord type, family composition of household, number of children in the household by age groups, household equivalised and gross weekly income, and two SEIFA indexes;
- Family level: contains information relating to family specific items such as family composition, number of children in the family by age groups, age of oldest and youngest person in the family;
- Person level: contains information only for persons aged 15 years and over such as age, sex, marital status, relationship in household, country of birth, year of arrival in Australia, education qualifications, employment arrangements including labour force details, working arrangements used to provide care, provision of care to adults and children, previous job details, superannuation account balances and contributions; and
- Job level: contains information for up to three jobs for each employed person aged 15 years and over such as occupation, industry, sector of employment, paid leave

entitlements, working arrangements and flexibility. Detailed information is available for the main and second jobs, although due to a small response size there is limited data available for the third job. To maintain the hierarchical structure of the file, each person will have job records for all three jobs, although some of these records will have null data due to no information being available or provided.

The table below shows the number of records on each level.

SEARS Expanded CURF Record counts

	Number of records
	no.
Household level	14 059
Family level	14 770
Person level	26 955
Job level	28 119

USING THE EPISODIC DATASET

The job level is an episodic dataset. The episodic dataset in SEARS 2007 is a set of data with a counting unit (jobs) which may be repeated for a person.

The item 'Job number' (ABSJID) can be used to differentiate between main, second and third job. ABSJID=1 is used to create items for main job, ABSJID=2 to create items for second job, and ABSJID=3 to create items for third job. These items can be used to count persons based on the characteristic of interest. However, if job number is not restricted then the counts are for characteristics of jobs (not persons).

Use of weights

On each level of the CURF, every record contains a 'weight'. The weight indicates how many population units are represented by the sample unit. See the discussion under Weighting in Chapter 3: 'Data processing' for more information.

The person weight identifier is WEIGHTPN and the household weight identifier is WEIGHTHH. In addition, replicate weights have been included, with 60 person replicate weights (WPM0101 - WPM0160) and 60 household replicate weights (WHM0101 - WHM0160). The purpose of these replicate weights is to enable the calculation of the RSE for each estimate produced from the CURF. For more information on RSEs, please refer to Chapter 4: 'Data Quality'.

The household weight can be found on both the household and family levels, while the person weight can be found on both the person and job levels. Where estimates are derived from the CURF, it is essential that they are calculated using the correct weight for that level of the file, and not just counting the number of records in each category. If person or household weights were to be ignored when analysing the data to draw inferences about the population, then no account would be taken of a person's or household's chance of selection, or of different response rates across population groups, and the resulting estimates may be seriously biased. The application of weights ensures that estimates conform to an independently estimated distribution of the population by age and other characteristics, rather than to the distributions within the sample itself.

It should be noted that as a result of some of the changes made to protect confidentiality on the CURF, estimates of benchmarked items produced from the CURF may not equal benchmarked values.

Incomplete families and households

Some family and household records are incomplete, that is, one or more people belonging to the unit did not respond to the survey. Where this is the case, they have an identifier of ICHHFLG set to '1' and the weight for the household and family level records has been set to nil. Therefore, when weighted statistics are produced from these files, the incomplete units are not represented in these statistics.

Record identifiers

There are several identifiers for each record on each of the levels.

Each household has a unique random identifier (ABSHID). This identifier appears on the household level, and is repeated on the family, person and job levels for each record relating to that household.

Each family within the household is numbered sequentially. Non-family members, single person households and persons in group households have a sequential 'family number' commencing at 50. 'Family number' (ABSFID) appears on the family, person and job levels. The combination of household identifier and family number uniquely identifies a family.

A family has one or more income units, and each income unit within the family is numbered sequentially. 'Income unit number' (ABSIID) appears on the person and job levels. SEARS does not output information at the income unit level, but the combination of household identifier, and family and income unit number uniquely identifies an income unit that can be used at the person and job levels.

An income unit has one or more persons and each person within the income unit is numbered sequentially. 'Person number' (ABSPID) appears on the person level. The combination of household identifier, and family, income unit and person number uniquely identifies a person.

A person may have one or more jobs and each of these is numbered sequentially. 'Job number' (ABSJID) appears on the job level. The combination of household identifier, and family, income unit, person and job number uniquely identifies a job.

At higher levels, identifiers for lower levels are set to zero. For example, on the household level, the identifiers for family, person, income unit and job are all set to zero.

Deriving items at a higher level

There may be instances when information is not provided at the level required by users and items will need to be derived at a higher level. For example, to determine the number of adults in a household which is not available on the household level, the information must be derived from the person level up to the household level. Deriving higher level estimates is possible using the person, family and household identifiers. Care should be taken to exclude persons from incomplete households and families by always using the weight applicable to

the higher level (that is, WEIGHTHH for family or household level derived estimates).

Copying data to a lower level

There may be instances when information is not provided at the lower levels as required by users. For example, characteristics of people such as age and sex are not included on the job level.

To copy data from the person level to the job level:

- sort person and job level by person. All records for a particular person must be sorted together. This can be done by sorting on the identifiers for household, family, income unit, and person (ABSHID, ABSFID, ABSIID, and ABSPID);
- match the records in person and job level by person. The records must be matched using the identifiers for household, family, income unit and person (ABSHID, ABSFID, ABSIID, and ABSPID); and
- copy the person level items to the corresponding job level records.

These steps will result in a new dataset containing all the person level information (e.g. age) attached to the job level data (e.g. occupation in job).

Special codes for income items

When analysing income totals at person, job and household level, it is necessary to exclude the reserved value of 99,999,998 for 'Not known or not stated' and 99,999,999 for 'Not applicable'. The data item list, Appendix 1 of this User Guide, lists the special codes for these items. Also, if more than one contributing income item at the person level has a value of 'Not known', then totals derived from these items, such as 'Gross personal income per week' are also set to 'Not known', as it was not possible to derive an accurate total. Similarly, if more than one contributing person record in a household has a value of 'Not known', then household income (both equivalised and gross) and derived income deciles are set to 'Not known/no income reported'. Care should be taken to exclude these codes when categorising higher income values, and when calculating means, medians and other summary statistics.

Special codes for other continuous items

When analysing continuous items at person and job levels, it is necessary to exclude the special codes. For example, 'Number of hours would like to work (all jobs) (NHRLWKA) has a reserved value of 998 for 'Not stated' and 999 for 'Not applicable'. The data item list, Appendix 1 of this User Guide, lists the special codes for continuous items. Care should be taken to exclude these codes when categorising higher values for ranges, and when calculating means, medians and other summary statistics.

Deriving equivalised income

Equivalised gross household income per week is expressed in continuous dollars as well as deciles. Equivalised income is derived by calculating an equivalence factor according to the chosen equivalence scale, and then dividing income by the factor.

The equivalence factor derived using the 'modified OECD' equivalence scale is determined by allocating points to each person in a household. The first adult in the household is given a weight of 1 point, each additional person aged 15 years and over is allocated 0.5 points, and each child under 15 years is allocated 0.3 points. Equivalised household income is derived by dividing the total household income by a factor equal to the sum of the equivalence points allocated to the household members. The equivalised income of a lone person household is the same as its unequivalised income. The equivalised income of a household comprising more than one person lies between the total value and the per capita value of its unequivalised income.

Equivalised household income is an indicator of the economic resources available to each member of a household. It can be used for comparing the situation of individuals as well as comparing the situation of households. When unequivalised household income is negative, such as when a loss is reported for an individual's unincorporated business or other investment income, and this loss is greater than any positive income from any other source, then equivalised household income is set to zero.

Equivalised gross household income per week deciles boundaries

To assist in the use and interpretation of the deciles, the dollar amounts contained in each decile are shown in the following table. Cases where income was 'not stated' or 'not known' were excluded before the deciles were calculated.

The table below shows the Equivalised gross household income per week (EQUIVDEC) decile boundaries.

Equivalised gross household income per week (EQUIVDEC) decile boundaries, for Expanded CURF

	min	max	Range
Lowest 10%	-	249.57	Less than 250.00
Second decile	250.00	322.50	250.00 to less than 322.67
Third decile	322.67	427.78	322.67 to less than 427.83
Fourth decile	427.83	538.10	427.83 to less than 538.13
Fifth decile	538.13	656.00	538.13 to less than 656.09
Six decile	656.09	779.62	656.09 to less than 780.00
Seventh decile	780.00	934.00	780.00 to less than 934.29
Eighth decile	934.29	1 142.00	934.29 to less than 1142.86
Ninth decile	1 142.86	1 503.33	1142.86 to less than 1503.81
Highest 10%	1 503.81	26 288.00	1503.81 or greater

- nil or rounded to zero (including null cells)

Multiple response items

There are a number of data items on the SEARS 2007 expanded CURF that contain multiple responses. Respondents were able to select one or more response categories for these items, and the output data items are multi-response in nature. This section describes these items and provides some information on how to use them.

All multiple response items are indicated in a certain way on the data item list, for example, the item 'All reasons not currently working' (NOTCWKA - NOTCWKU) captures the first response in the first, or 'A', position e.g. (NOTCWKA), and additional responses (if provided)

are in the subsequent positions e.g. second and then third, or 'B' and then 'C' positions. If a person did not answer the question then they will have a value of 0 'not applicable' in the first position (NOTCWKA). The 'Null response' (value of 0) is a default code and should not be used in data analysis.

Geography

To enable CURF users greater flexibility in their analyses, the ABS has included Socio-economic Indexes for Areas (SEIFA) and sub-state geography items on the SEARS 2007 expanded CURF. Cross-tabulations by several of these items simultaneously produce cells relating to some small geographic regions. Tables showing multiple data items, cross-tabulated by more than one SEIFA and/or sub-state geography at a time, are not permitted due to the detailed information about small geographical regions that could be presented. However, simple cross-tabulations of population counts by SEIFA or sub-state geographic data items may be useful for clients in order to determine which SEIFA or geography item to include in their primary analysis, and such output is permitted.

See the Glossary for the definitions of the SEIFA data items included on the SEARS 2007 expanded CURF. For more information about SEIFA see Information Paper: **Census of Population and Housing - Socio-economic Indexes for Areas, Australia** (cat. no. 2039.0)**.**

Children aged under 15 years

Children aged under 15 years do not have their own person level record. Information on the number and ages of such children was collected and is included on the household and family level files.

Changes relating to data items

Between the first and second iterations of this survey there were changes to specific data items. As SEARS 2007 included new question modules, conceptual and methodological changes, and an expansion of scope, these changes are too substantial to list individually. Issues affecting the comparability of SEAS 2000 and SEARS 2007 are outlined in Chapter 1: 'Introduction'. CURF users who are undertaking comparisons with the SEAS 2000 CURF should take care to compare items they are using for analysis by using the supporting information, user guide and attachments, and data item lists available for both SEAS 2000 and SEARS 2007, as well as Appendix 1 and Appendix 2 of **Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007** (cat. no. 6361.0). Particular attention should be paid to the definition of the data item, populations relating to the data item, and reference periods that apply.

SEARS 2007 CURF files

The CURF is only available via the RADL. It is available in several different formats (SAS, SPSS, STATA). The names of the expanded CURF files are listed below:

SAS files:

These files contain the data for the expanded CURF in SAS for Windows format:

- ERS07EH.SAS7BDAT contains the Household level data;
- ERS07EF.SAS7BDAT contains the Family level data;
- ERS07EP.SAS7BDAT contains the Person level data; and
- ERS07EJ.SAS7BDAT contains the Job level data.

SPSS files:

These files contain the data for the expanded CURF in SPSS for Windows format:

- ERS07EH.SAV contains the Household level data;
- ERS07EF.SAV contains the Family level data;
- ERS07EP.SAV contains the Person level data; and
- ERS07EJ.SAV contains the Job level data.

STATA files:

These files contain the data for the expanded CURF in STATA format:

- ERS07EH.DTA contains the Household level data;
- ERS07EF.DTA contains the Family level data;
- ERS07EP.DTA contains the Person level data; and
- ERS07EJ.DTA contains the Job level data.

Information Files

- FORMATS.SAS7BCAT - This file is a SAS library containing formats.
- README.TXT - This is a text file describing the contents of the CURF.
- RESPONSIBLE ACCESS TO ABS CURFs TRAINING MANUAL_MAR05.PDF - This is an acrobat file explaining the CURF users' role and obligations when using confidentialised data.
- **Employment Arrangements, Retirement and Superannuation, Australia: Confidentialised Unit Record File, User Guide, 2007** (cat. no. 6361.0.55.002)
- **Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007** (cat. no. 6361.0)
- ABS CONDITIONS OF SALE.PDF - This file describes ABS conditions of sale.
- COPYRITE1.BAT - This file describes copyright obligations for CURF users.
- IMPORTANT INFORMATION FOR CURF USERS_300903.PDF - This file directs users to the ABS website for more and up to date information on what is available from the ABS.
- 6361.0.55.002 SEARS 2007 CURF Data Items.XLS - This file contains documentation of SEARS 2007 data items including data item labels, code values and category labels.
- FREQUENCIES_ERS07EH.TXT - This file contains documentation of the Household level data. Data item code values and category labels are provided with weighted and unweighted household frequencies of each value. This file is in plain text format.
- FREQUENCIES_ERS07EF.TXT - This file contains documentation of the Family level data. Data item code values and category labels are provided with weighted and unweighted family frequencies of each value. This file is in plain text format.
- FREQUENCIES_ERS07EP.TXT - This file contains documentation of the Person level data. Data item code values and category labels are provided with weighted and unweighted person frequencies of each value. This file is in plain text format.
- FREQUENCIES_ERS07EJ.TXT - This file contains documentation of the Job level

data. Data item code values and category labels are provided with weighted and unweighted job frequencies of each value. This file is in plain text format.

CONDITIONS OF RELEASE

The SEARS 2007 expanded CURF has been released in accordance with a Ministerial Determination (Clause 7, Statutory Rules 1983, No. 19) in pursuance of section 13 of the **Census and Statistics Act 1905**. As required by the Determination, the CURF has been designed so that the information on the files is not likely to enable the identification of the particular person or organisation to which it relates. The Australian Statistician's approval is required for each release of a CURF. In addition, the ABS requires all organisations and individuals within organisations who purchase or are seeking to use a CURF to sign an undertaking to abide by the legislative restrictions on use, before access to the CURF will be granted. The undertaking includes, among other conditions, that in using the data people will:

- use the information only for the statistical purposes specified in the Schedule to the Undertaking;
- not attempt to identify particular persons or organisations;
- not disclose, either directly or indirectly, the information to any other person or organisation other than members of this organisation who have been approved by the ABS to have individual access to the information;
- not attempt to match, with or without using identifiers, the information with any other list of persons or organisations;
- comply with any other direction or requirement specified in the ABS Responsible Access to ABS CURFs Training Manual; and
- not attempt to access the information after the term of their authorisation expires, or after their authorisation is rescinded by the organisation which provided it, or after they cease to be a member of that organisation.

Use of the data for statistical purposes means use of the CURF data to produce information of a statistical nature. Examples of statistical purposes are:

- manipulation of the data to produce means, correlations or other descriptive or summary measures;
- estimation of population characteristics;
- use of data as input to mathematical models or for other types of analysis (e.g. factor analysis); and
- providing graphical or pictorial representations of the characteristics of the population or subsets of the population.

All CURF users are required to read and abide by the Responsible Access to ABS Confidentialised Unit Record Files (CURFs) Training Manual available on the ABS website <www.abs.gov.au> (see Services We Provide/CURF Microdata/Accessing CURF Microdata/Responsible Access to ABS CURFs).

Conditions of sale

All ABS products and services are provided subject to the ABS conditions of sale. Any queries relating to these Conditions of Sale should be referred to

<intermediary.management@abs.gov.au>.

Access method

Due to the level of detail provided, the SEARS 2007 expanded CURF is only available via the ABS Remote Access Data Laboratory (RADL).

Price

The current recommended retail price of the SEARS 2007 expanded CURF is $1,320 (including GST).

Australian Universities

University clients should refer to the ABS website (see Services We Provide, Services to Universities). The SEARS 2007 expanded CURF can be accessed by universities participating in the ABS/Universities Australia CURF Agreement for research and teaching purposes.

Other clients

Other prospective clients should contact the Microdata Access Strategies Section of the ABS at <microdata.access@abs.gov.au> or on (02) 6252 7714.

About this Release

The Guide explains data content, technical details and conditions of use for the Confidentialised Unit Record File (CURF) from the Survey of Employment Arrangements, Retirement and Superannuation (SEARS) which is accessible through the ABS Remote Access Data Laboratory (RADL). For more information about accessing CURFS, see Services We Provide - Confidentialised Unit Record Files at www.abs.gov.au.

SEARS is a household survey conducted throughout Australia between April and July 2007. The survey provides information on employment arrangements in the Australian workforce (e.g. job duration, access to paid leave, hours worked and work patterns), work and caring responsibilities, plans that people have for retirement, and saving for retirement through superannuation.

The information in the Guide on the data content provides details about the concepts and methods used in collecting and processing SEARS to help users make informed choices on the suitability of the estimates for particular uses. The Guide also provides a list of all data items available from the survey.

Explanatory Notes

Glossary

GLOSSARY

Account balance

This is the amount of superannuation a person has accrued in an accumulation fund account. The total account balance is the sum of all balances for up to three accounts per person. Balances are available only for accounts in the accumulation phase.

Accumulation account

Accumulation accounts are superannuation accounts held with accumulation funds. See also Defined benefit fund and Hybrid fund.

Accumulation fund

Accumulation funds are superannuation funds where all members have defined contributions (accumulated benefits). These funds are also sometimes called allocated funds. The assets of the fund are invested and any earnings (or losses) are credited (debited) to the member's account less any costs or taxes. The value of a retirement benefit from accumulation funds depends on how much money is contributed to the fund and how much the fund earns from investing the money after deducting costs and taxes. Members bear the full effect of fluctuation in investment performance. In SEARS 2007, self-managed funds and small APRA funds were categorised as accumulation accounts. See also Defined benefit fund and Hybrid fund.

Accumulation phase

A person accumulates superannuation balances over a period of time in order to support their future retirement. Accounts accumulate from a mix of personal and employer contributions, and investment earnings. Accounts are considered to accumulate even if contributions are not currently being made to them, or if there are negative investment returns.

For some people, it is possible to accumulate benefits, as well as to draw on superannuation, at the same point in time.

Allocated pension or annuity

An allocated pension or annuity is a flexible income stream where a person has an account from which they regularly (e.g. monthly) draw down an amount, within certain legislated limits. The pension/annuity continues until death or until the account is exhausted. On death, the remaining balance in the account is usually paid to a designated beneficiary. An allocated pension/annuity offers continual access to the capital sum invested, flexibility in drawdowns, but no guarantee on how long the income lasts.

The difference between a superannuation pension and an annuity is that a pension is only available from superannuation funds and can only be purchased with superannuation money (that is, money paid out from a superannuation fund or retirement savings account), while an annuity can be purchased from life insurance companies using superannuation money or other savings.

Amount of time usually spent travelling to/from work (per day)

This includes the amount of time spent doing regular activities along the way, such as dropping off children and/or partner. Since the amount of time travelling to work and the amount of time travelling from work were collected in ranges of minutes or hours, they cannot be added together to get total travel time.

Balance of State

That part of each Australian State or Territory not defined as capital city. The area includes the Australian Capital Territory and the Northern Territory (except those in very remote areas).

Benefit structure of a superannuation fund

The way in which a member's superannuation benefit is determined. Superannuation benefits may be 'accumulated benefits', 'defined benefits', or a combination of both. For more information about the different types of benefits see Accumulation fund, Defined benefit fund and Hybrid fund.

Bottom coding

Reduction of all low values to a specified minimum value.

Capital city

Refers to Australia's six State capital city Statistical Divisions and the Darwin Statistical Division as defined in the **Australian Standard Geographical Classification (ASGC)** (cat. no. 1216.0). For the Australian Capital Territory the estimates relate predominantly to urban areas.

Care

For the purposes of this survey care is provided by any person in Australia aged 15 years or over who:

- had their own child(ren) aged under 15 years living with them;

or who

- looked after their own child(ren) aged under 15 years who do not usually live with them;
- looked after a child other than their own child aged under 15 years of age;
- helped or supported a frail aged person in day-to-day activities;
- helped or supported any person aged 15 years or over with a short or long term sickness, injury or condition with day-to-day activities

where this care is not done as part of paid or voluntary work.

Separate estimates are available for care given to person living in the same household as the carer and care given to people who do not live in the same household as the carer, but the publication shows all care provided.

It is possible for a carer to provide care to more than one person. It is also possible for more

than one person in a household to provide care to the same person.

Carer's leave

Paid leave provision by employers in relation to periods of time spent caring for others.

Casual loading

Provision by an employer of a higher rate of pay to compensate for not being entitled to paid holiday and/or paid sick leave.

Compensated extra hours worked

Refers to extra hours worked that were not paid but were compensated in some other way such as time off in lieu of extra hours worked, non-cash benefits provided as part of salary package/working agreement or other non-cash benefit. While payment for extra hours worked is one type of compensation, for the purpose of analysis details about paid extra hours worked are shown separately from extra hours otherwise compensated. Details of unpaid extra hours are also available.

Confidentiality

The maintenance of privacy of information that has been provided by individual respondents, and assurance that information about individual respondents cannot be derived from published survey results.

Contributing family worker

A person who works without pay in an economic enterprise operated by a relative.

Control over working procedures

This is one of several indicators used to determine the autonomy of an owner manager who works on a contract. For someone to have the authority to tell owner managers working on a contract basis how to do their work they must have the authority to control the process of how the work is done to achieve an outcome, rather than just specify the outcome to be achieved. Other indications of the autonomy of an owner manager who works on a contract include the ability to work for multiple clients, and whether able to sub-contract their work.

Defined benefit fund

A superannuation fund in which the retirement benefit is determined by fund rules usually based on a formula that takes into account years of service with the employer or years of membership with the fund, and average salary level over the last few years prior to retirement. The defined benefits do not depend on the investment performance of the fund. See also Accumulation fund and Hybrid fund.

Dependent children

All persons aged under 15 years; and dependent students as defined.

Dependent students

A child who is 15-24 years of age, who is attending full-time education, and who has no partner or child of his or her own usually resident in the same household.

Drawing on superannuation

A person is considered to draw on their superannuation if they receive a superannuation pension or annuity, or if they have received a superannuation lump sum within the past 4 years. A person can draw on their superannuation usually only after reaching the preservation age for the account or on attaining age 65.

For some people, it is possible to draw on superannuation, as well as to accumulate benefits, at the same point in time.

Educational attainment

Level of education is defined as a function of the quality and quantity of learning involved in an educational activity. It is categorised according to the **Australian Standard Classification of Education (ASCED), 2001** (cat no.1272.0).

Employed full-time

Employed persons who usually work 35 hours or more a week (in all jobs) and others who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Employed part-time

Employed people who usually work less than 35 hours a week (in all jobs) and who either did so during the reference week, or were not at work during the reference week.

Employed persons

Persons aged 15 years and over who, during the week before the interview :

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (including employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than 4 weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or
  - on strike or locked out; or
  - on workers' compensation and expected to be returning to their job; or
- were employers or own account workers who had a business or farm, but were not at work.

Employees

A person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece rates, or payment in kind, or a person who operates their own incorporated enterprise with or without hiring employees. The employment type classification separates owner managers

of incorporated businesses from other employees.

Employees with paid leave entitlements

Employees excluding owner managers of incorporated enterprises (OMIEs) who were entitled to either paid sick leave or paid holiday leave (or both). Available in SEARS 2007 in relation to main job, second job, third job and fourth job.

Employees without paid leave entitlements

Employees (excluding OMIEs) who were not entitled to paid holiday leave or paid sick leave, or did not know whether they were entitled to paid holiday leave or paid sick leave. Available in SEARS 2007 in relation to main job, second job, third job and fourth job.

Employers

People who operate their own unincorporated economic enterprise or engage independently in a profession or trade, and hire one or more employees.

Employer contribution

The amount contributed (pre-tax) to a person's superannuation fund by their employer or business. The Superannuation Guarantee scheme, introduced in 1992, requires employers to contribute a minimum amount to superannuation for most of their employees (there are some exemptions). In 2007 employers were required to contribute an amount equal to 9% of an employee's wages or salary into superannuation.

While salary sacrifice is technically an employer contribution, the amount of salary sacrifice is shown separately to other employer contributions. (See Salary sacrifice to superannuation for more information).

Employment agency or labour hire firm

An organisation which is engaged in personnel search, selection and placement of employees for an employing organisation or person, and/or is engaged in supply of their own employees to other employers, usually on a short-term basis. Information is gathered about whether an employed person obtained their job through an employment agency/labour hire firm. Further questions are asked to establish whether or not the relationship with the labour hire company is ongoing: whether they are still paid by the employment agency/labour hire firm, and whether they are still registered with the labour hire firm.

Employment type

Classification of employed persons according to the following groups:

- employees (excluding OMIEs) with paid leave entitlements
- employees (excluding OMIEs) without paid leave entitlements
- owner managers of incorporated enterprises
- owner managers of unincorporated enterprises
- contributing family workers

SEARS 2007 collected only limited information about contributing family workers and they have been excluded from most tables in the publication.

Equivalised gross household income

Gross household income adjusted using an equivalence scale. For a lone person household it is equal to gross household income. For a household comprising more than one person, it is an indicator of the gross household income that would need to be received by a lone person household to enjoy the same level of economic wellbeing as the household in question. For more information about deriving equivalised income see **User Guide: Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007** (cat. no. 6361.0.55.002).

Equivalised gross household income deciles

These are groupings of 10% of the total population when ranked in ascending order according to equivalised gross household income. The population used for this purpose includes all people living in private dwellings, including children and other persons under the age of 15 years. As the scope of this publication is restricted to only those persons aged 15 years and over, the distribution of this smaller population across the quintiles is not necessarily the same as it is for persons of all ages, i.e. the percentage of persons aged 15 years and over in each of these deciles may be larger or smaller than 10%.

Extra hours or overtime

Work undertaken which is outside, or in addition to, ordinary working hours of the respondent in their main job, whether paid or unpaid.

Family

Two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.

Family composition of household

Classifies households into three broad groupings based on the number of families present (one family, multiple family and non-family). One family households are further disaggregated according to the type of family (such as couple family or one parent family) and according to whether or not dependent children are present. Non-family households are disaggregrated into lone person households and group households.

Fixed-term contract

Employees (excluding OMIEs) with a contract of employment which specifies that the employment will be terminated on a particular date/event and who consider themselves to be working on a fixed-term contract.

Formal agreement (to work flexible hours or work from home)

An agreement that is in writing. A written agreement can be in the form of, but not limited to, a collective agreement or certified agreement made directly between and employer and a group of employees, or an individual written agreement between employer and employee.

Formal child care

Regulated care away from the child's home. This includes before and/or after school care, long day care, family day care, preschool and kindergarten centres, and occasional care.

Full-time or part-time study status

People who are attending school or taking a course of study for a trade certificate, diploma, degree or any other educational qualification, classified according to whether they report that they are studying full-time or not.

Government co-contribution

The government co-contribution was introduced from 1 July 2003. This is an additional super contribution paid by the Australian Government to low income earners who make after-tax contributions.

SEARS 2007 did not collect the amount of government co-contribution but it did ask people making personal contributions to superannuation if they made those contributions in order to receive the government co-contribution.

Government pension/allowance

Income support payments from government to people under social security and related government programs. Included are pensions and allowances received by aged, disabled, unemployed and sick people, families and children, veterans and their survivors, and study allowances for students. Payments made by overseas governments as well as the Australian Government are included.

Gross income

Regular cash receipts (including salary sacrificed income) before income tax or the Medicare levy are deducted.

Gross household income

Aggregated before-tax income of all members of the household aged 15 years and over. It includes regular receipts from employment, own business and from the lending of assets. It also includes transfer income from government, private institutions and other households but excludes intra-household transfers.

Holiday leave

Provision by an employer of paid holiday, vacation or recreation leave.

Hours actually worked

The number of hours actually worked during the reference week, not necessarily paid for.

Hours usually worked

The number of hours usually worked per week by an employed person.

Household

One or more related or unrelated people who usually reside in the same private dwelling.

Hybrid fund

A fund in which benefit entitlements are based on a combination of accumulated benefits and defined benefits. See also Accumulation fund and Defined benefit fund.

Income

Any accruing cash receipts that are of a regular and recurring nature including money received from:

- wages and salaries (from an employer or own incorporated enterprise), including income provided as part of a salary sacrifice arrangement;
- profit/loss from own unincorporated business (including partnerships);
- investment income (interest, rent, dividends);
- government pensions and allowances;
- superannuation payments;
- other private cash transfers (eg. regular workers' compensation, child support and other transfers from other households).

Gross income is the sum of income from all these sources before income tax or the Medicare levy are deducted.

Index of education and occupation (Australia)

One of five of the Socio-Economic Indexes for Areas (SEIFAs) compiled by the ABS following each population census. Each of the indexes summarise different aspects of the socio-economic status of the people living in those areas. The Index of Education and Occupation is designed to reflect the educational and occupational structure of communities. The education variables in this index show either the level of qualification achieved or whether further education is being undertaken. The occupation variables classify the workforce into the major groups of the **Australian Standard Classification of Occupations (ASCO)** and the unemployed. The index refers to population of the area (the Census Collector's District) in which a person lives, not to the socio-economic situation of the particular individual. The index used in this publication was compiled following the 2001 Census. For further information about the SEIFAs see **Information Paper: Census of Population and Housing - Socio-Economic Indexes for Areas, Australia** (cat. no. 2039.0). This index is available in the SEARS 2007 CURF.

Index of relative socio-economic disadvantage (Australia)

One of five of the Socio-Economic Indexes for Areas (SEIFAs) compiled by the ABS following each population census. Each of the indexes summarise different aspects of the socio-economic status of the people living in those areas; the index of relative socio-economic disadvantage includes attributes such as low income, low educational attainment, high unemployment and jobs in relatively unskilled occupations. The index refers to population of the area (the Census Collector's District) in which a person lives, not to the socio-economic situation of the particular individual. The index used in this publication was compiled following the 2001 Census. For further information about the SEIFAs see **Information Paper: Census of Population and Housing - Socio-Economic Indexes for Areas, Australia (cat. no. 2039.0). This index is available in the SEARS 2007 CURF.**

Industry

An industry is a group of businesses or organisations that undertake similar economic activities to produce goods and services. In this publication industry is classified according to the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006 (<u>cat. no. 1292.0</u>). Information is also available on request for industry classified by the Australian and New Zealand Standard Industrial Classification (ANZSIC), 2003 (<u>cat. no. 1292.0</u>).**

Informal child care

Non-regulated care either in the child's home or elsewhere. Care may be charged for or provided free of charge. It includes care provided by (step) brothers or sisters, grandparents, other relatives or other (unrelated) people such as friends, neighbours, nannies or babysitters.

Intends to retire from the labour force

Those people who indicated that they intend to give up all labour force activity, that is working or looking for work.

Labour force status

A classification of the civilian population aged 15 years and over into employed, unemployed or not in the labour force, as defined. The definitions conform closely to the international standard definitions adopted by the International Conferences of Labour Statisticians.

Landlord type

For renters the type of entity to whom rent is paid or with whom the tenure contract or arrangement is made.

Last job

Refers to last job held by an unemployed person or a person not in the labour force. In this survey details about the last job are collected only for persons aged 45 years or over and no details were collected if that job was held 20 or more years ago.

Last full-time job

Refers to last full-time job held by a person currently employed part-time as well as the last full-time job of an unemployed person or a person not in the labour force. In this survey, details about the last full-time job are collected only for persons aged 45 years or over, and no details about the last full-time job were collected if that job was last held 20 or more years ago.

Lifetime guaranteed pension or annuity

A lifetime guaranteed pension or annuity provides a guaranteed pension income for the remainder of a person's life. It can also provide a reversionary pension or annuity to make income payments to a designated beneficiary after death.

Long service leave

Provision of paid leave by an employer or industry body in recognition of a long period of service.

Long-term health condition or disability

If a person has provided care to someone for 6 months or more, or expects to care for someone for at least 6 months, then they are identified as caring for someone with a long-term health condition or disability.

Main job

The job in which most hours are usually worked, excluding voluntary jobs. SEARS 2007 collected detailed information for main job and second job, and a reduced set of information for the third job and fourth job, where applicable. Information about the main job, or all jobs collectively is presented in the publication

Masking

Adjustment of variable values, for individual records, for the purpose of avoiding a possible breach of confidentiality.

Median

The median is the middle observation in a set of observations ranked from largest to smallest, that is, the observation for which there are as many observations with higher values as there are observations with lower values.

Mean

The mean of a numeric variable is calculated by summing the values of all observations in a data set and then dividing by the number of observations in the set. It is often referred to as the average.

Microdata

Unit record level statistical data.

Non-dependent children

All persons aged 15 years or over (except those aged 15-24 years who are full-time students) who have a parent in the household and do not have a partner or child of their own in the household.

Non-income source

Sources of funding for individuals which do not create a periodical inflow of revenue/cash direct to the individual. Includes spouse/partner income, selling assets and living off savings.

Not in the labour force

Persons not classified as employed or unemployed, as defined.

Occupation

An occupation is a collection of jobs that are sufficiently similar in their title and tasks, skill level and skill specialisation which are grouped together for the purposes of classification. In this publication occupation is classified according to the **Australian and New Zealand Standard Classification of Occupations (ANZSCO), 2006** (cat. no. 1220.0). Occupation

classified according to the **Australian Standard Classification of Occupation (ASCO) 1997 (<u>cat. no. 1220.0</u>) is also available on request.**

On call/stand-by

An arrangement for an employee to be available, while not at work, to be contacted to resume work. An allowance may be paid for being on call.

Overtime

See Extra hours.

Own account worker

People who operate their own unincorporated economic enterprise or engage independently in a profession or trade, and hired no employees.

Owner managers

A collective term referring to both owner managers of incorporated enterprises and owner managers of unincorporated enterprises.

Owner managers of incorporated enterprises

Persons who work in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (also known as a limited liability company). These people are classified as employees under 'status in employment'.

Owner managers of unincorporated enterprises

Persons who operate their own unincorporated enterprise, that is, a business entity in which the owner and the business are legally inseparable, so that the owner is liable for any business debts that are incurred. This includes those engaged independently in a trade or profession.

Parental/maternity/paternity leave

The provision by an employer of paid leave to employees before and after the birth of a child.

Perturbation

Adjustment of estimates to disguise individual values without affecting the statistical validity of aggregate data.

Personal contributions

Post-tax contributions made by a person to their own superannuation account.

Post-tax contributions

Contributions made to a superannuation account from own sources, such as post-tax income, savings, business profits, or from selling an asset.. These contributions comprise personal contributions and contributions made by a persons spouse/partner into their superannuation account, as defined.

Preference for the number of hours worked

Whether an employed person would prefer to work more hours, fewer hours, or the same number of hours as they currently work while taking into consideration the effect this would have on their current pay.

Pre-tax contributions

Contributions made to a superannuation account from pre-tax income. These contributions comprise employer/business contributions and salary sacrificed contributions to superannuation, as defined.

Previous retirement

Where persons have in the past given up all employment, with no intention to returning to work at the time, but who have now returned to either part time or full-time work.

Principal source of income

The source of income from which the most positive income is received. If total income is nil or negative the principal source is nil or negative. If more than one source of income is not stated/not known then the principal source is undefined. As there are several possible sources, the principal source may account for less than 50% of total income.

Proficiency in spoken english

A self assessment by persons who speak a language other than English at home, of whether they speak English very well, well, not well, or not at all.

Provided care

Whether a person provided care (See 'Care') in the reference week.

Reference week

The week preceding the week in which the interview was conducted.

Relationship in household

The relationship of each person in a family to the family reference person, or where a person is not part of a family, that person's relationship to the household reference person.

Retired from labour force

People who had previously worked for two weeks or more, were not in the labour force and who did not intend to look for, or take up, paid work in the future.

Salary sacrifice to superannuation

Salary sacrifice to superannuation is an arrangement between an employer and an employee which involves the employee giving up a part of their pre-tax salary in exchange for having the employer provide an alternative tax effective benefit, such as superannuation contributions

Section of State

This geographical classification uses population counts to define Collection Districts (CDs) as urban or rural and to provide, in aggregate, statistics for urban concentrations and for bounded localities and balance areas. SOS represents an aggregation of non-contiguous geographical areas of a particular urban/rural type. The Sections of State defined include Major Urban (population clusters of 100,000 or more), Other Urban (population clusters of 1,000 to 99,999), Rural Locality (200 to 999), Rural Balance (remainder of State/Territory) and Migratory, and in aggregate cover the whole of Australia.

Sector of employment

Used to classify a respondent's employer as a public or private enterprise. The public sector includes all government entities including local, state and federal government departments, non-market non-profit institutions that are controlled and mainly financed by government, and corporations and quasi-corporations that are controlled by government.

Self-funding

Those who expect to be self-funding in retirement include those whose main expected source of income on retirement is profit or loss from own unincorporated business, profit or loss from a rental property, dividends or interest, or superannuation or annuity. These people are asked to estimate how long they will be self-funding after they give up all paid work.

Self-identified casuals

Employees (excluding OMIES) who considered their job to be casual. In SEARS 2007, 'employees without leave entitlements' is the primary measure of casual employment, however self-identification of casual status and 'whether a casual loading is paid' are also available as supplementary indicators of casual employment.

Shift work

A system of working whereby the daily hours of operation at the place of employment are split into at least two set work periods (shifts), for different groups of workers.

Sick leave

Paid sick leave is paid leave which is provided for employees who are unable to attend work because they are ill, injured, or have a medical appointment.

Size of location

Number of persons employed at the same address as the person's employer or business. If owner managers do not hire employees their size of location is one.

Social marital status

The relationship status of an individual with reference to another person who is usually resident in the household. A marriage exists when two people live together as husband and wife, or partners, regardless of whether the marriage is formalised through registration. Individuals are, therefore, regarded as married if they are in a de facto marriage, or if they are living with the person to whom they are registered as married.

Spouse contributions

Contributions paid into a person's superannuation account by their husband, wife or de facto spouse from post-tax income.

Status in employment

Employed persons classified by whether they were employees, employers, own account workers, or contributing family workers. This classification is available from the survey, however, the employment type classification is the main classification used to describe employed persons in this survey.

Superannuation

A long-term savings arrangement which operates primarily with a superannuation fund in order to support future retirement.

Superannuation balance

The total amount of superannuation a person has accrued in their superannuation funds which are in the accumulation phase. In SEARS 2007, the total superannuation balance was obtained by adding the total account balance of accumulation account/s and total withdrawal or resignation benefit of defined benefit account/s or hybrid account/s for three main superannuation accounts.

Superannuation contributions

Superannuation contributions are payments made by an employer or an individual in the superannuation fund. For more details see Employer contributions, Salary sacrificed contributions, Personal contributions and Spouse contributions.

Superannuation coverage

In this publication, a person is considered to have superannuation coverage if:

- they have superannuation accounts in the accumulation phase;
- they have superannuation accounts from which they are currently drawing benefits, such as receiving a pension or annuity; or
- they have received a superannuation lump sum within the past 4 years.

Superannuation lump sum payment

A superannuation benefit taken fully or partly as a single payment, rather than in the form of pension or annuity on retirement. It does not include any annual leave payments, sick leave or other payments due to termination of employment.

SEARS 2007 collected detailed information on lump sum payments received during the previous 4 years and whether any lump sum payments had been previously received.

Superannuation pension or annuity

A pension or annuity payable from a superannuation account or retirement saving account (RSA) and eligible for tax concessions. The payment must be made at least annually and must be within limits set by legislation.

Tenure type

The nature of a household's legal right to occupy the dwelling in which the household members usually reside. Tenure is determined according to whether the household owns the dwelling outright, owns the dwelling but has a mortgage or loan secured against it, is paying rent to live in the dwelling or has some other arrangement to occupy the dwelling.

Topcoding

Reduction of all high values to a specified maximum value.

Unemployed

Persons aged 15 years and over who were not employed during the reference week, and

- had actively looked for full-time or part-time work at any time in the four weeks up to the end of the reference week and were available to work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

Withdrawal/resignation benefit

A proxy measure of the present value of the benefit accrued to members of defined benefit and hybrid funds. Total withdrawal/resignation benefits include the balances of up to three accounts. In many cases withdrawal or resignation benefit values will understate a person's full benefit entitlement because the withdrawal or resignation benefit will exclude provisions for superannuation liabilities that are not contributed to the individual's accounts.

Working arrangements to care

Working arrangements that were used so that the respondent could care for someone in the week prior to the survey. Arrangements include paid leave, unpaid leave, flexible working hours, rostered days off, working from home, informal arrangements with employer or taking a child in to work. Further information was collected to determine whether respondents would like to have used more of any working arrangement that they had accessed, or any other arrangement to help with their caring responsibilities. Also, those who had not used any working arrangement, were asked whether they wanted to but couldn't. People who cared for someone in the reference week and who had not used any working arrangements to help them manage this responsibility were asked whether they would like to have accessed any arrangement but could not, and why they did not access any arrangement.

In SEARS 2007 inadequate information about working arrangements used to care was collected for a small proportion of households (<1%). These are shown in a 'not determined' category for the applicable data items.

Working arrangements to provide long-term care

Long-term changes in working arrangements to provide care, including: changing or leaving a job, reducing total number of hours usually worked, commencing work all or more hours from home, or changing to another work arrangement such as shift work, casual work or a job share arrangement. Perceptions of these terms were left to the respondent. Only carers who were employees were asked questions about these working arrangements.

Working on a contract basis

Owner managers of incorporated and unincorporated enterprises who worked on a contract, that is, who were engaged to provide a particular service or undertake a particular task at an agreed price or rate, and generally for a specified period.

Abbreviations

ABBREVIATIONS

The following symbols and abbreviations are used in this publication:

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
ANA	Australian National Accounts
ANZSCO	Australian and New Zealand Standard Classification of Occupations
APRA	Australian Prudential Regulation Authority
ASCED	Australian Standard Classification of Education
ASCL	Australian Standard Classification of Languages
ASCO	Australian Standard Classification of Occupations
ASGC	Australian Standard Geographical Classification
Aust.	Australia
CAI	computer assisted interviewing
CD	collection district
CSV	comma separated value
CURF	confidentialised unit record file
ERP	estimated resident population
FTB	Family Tax Benefit
GST	goods and services tax
incl.	including
MPHS	Multi-Purpose Household Survey
no.	number
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
OMIE	owner manager of incorporated enterprise
OMUE	owner manager of unincorporated enterprise
PAL	primary approach letter
PAPI	pen-and-paper interview
Qld	Queensland
RADL	Remote Access Data Laboratory
RSE	relative standard error
SA	South Australia
SACC	Standard Australian Classification of Countries
SE	standard error
SEARS	Survey of Employment Arrangements, Retirement and Superannuation
SEAS	Survey of Employment Arrangements and Superannuation
SEIFA	Socio-Economic Indexes for Areas
SLA	statistical local area
Tas.	Tasmania
Vic.	Victoria
WA	Western Australia

Data items (Appendix)

APPENDIX 1 DATA ITEMS

SEARS 2007 DATA ITEMS

The SEARS 2007 data item list is available on the ABS web site <www.abs.gov.au>, entitled '6361.0.55.002 SEARS 2007 Survey Data Items.XLS'.

SEARS 2007 CURF DATA ITEMS

The SEARS 2007 CURF data item list is available on the ABS web site <www.abs.gov.au>, entitled '6361.0.55.002 SEARS 2007 CURF Data Items.XLS'.

Prompt cards (Appendix)

APPENDIX 2 PROMPT CARDS

SEARS 2007 PROMPT CARDS

The SEARS 2007 prompt cards are available on the ABS web site <www.abs.gov.au>, entitled '6361.0.55.002 SEARS 2007 Prompt Cards.pdf'.

Questionnaire (Appendix)

APPENDIX 3 QUESTIONNAIRE

SEARS 2007 QUESTIONNAIRE

The SEARS 2007 questionnaire is available on the ABS web site <www.abs.gov.au>, entitled '6361.0.55.002 SEARS 2007 Questionnaire.pdf'.

Data Cubes (I-Note) - Data Cubes

CURF data item list updated to reflect the removal of the SEIFA variable IEOCDH from the

expanded CURF.

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